

DOCUMENT RESUME

ED 228 603

CS 007 035

AUTHOR Covner, Thelma Crockin
TITLE A Study: The Relationship of Personality Type to Vocabulary Development.
PUB DATE 81
NOTE 21p.; Appendixes consist of tests referenced by document, but not included with it.
PUB TYPE Reports - Research/Technical (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Style; College Students; Higher Education; Personality Measures; *Personality Studies; *Personality Traits; *Reading Research; *Vocabulary Development
IDENTIFIERS Myers Briggs Type Indicator

ABSTRACT

To test the hypothesis that aspects of one's personality are associated with expansion of his or her vocabulary, a study focused on thirteen students of various ages who constituted a vocabulary development class. Students were taught techniques for discovering meaning through context or extracting meaning through word structure. Considerable time was also spent in dictionary use as well as in a workbook approach to Latin and Greek roots, adverbs, and adjectives. During a 10 week quarter, students took a pretest, weekly quizzes, a midquarter exam, and the final exam containing a posttest. At the end of the quarter, students took the Myers-Briggs Type Indicator derived from Carl Jung's personality typology. The questionnaire classified students according to four major dichotomous groupings, each designed to indicate direction or a "habitual choice between opposites": (1) extraversion or introversion, (2) sensing or intuition, (3) thinking or feeling, and (4) judging or perceiving. Responses and test scores indicated that students who were intuitive types consistently did better than students who were sensing personality types. The intuitive-perceiving type even surpassed the intuitive-feeling type. Among the sensing types, those who were sensing-thinking had higher pretest scores than the sensing-feeling students. (HOD)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED228603

The Relationship of Personality Type
to Vocabulary Development. A Study.

by

Thelma Crockin Covner, MA
University of Minnesota, Duluth

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Thelma Crockin Covner

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Copyright Thelma C. Covner 1981

CS007035

Table of Contents

	Page
Introduction	1 - 4
Philosophies	2
The Vocabulary Development Course.....	3
The Study	4 -16
Results	7
Discussion	12
Summary and Conclusions.....	15
Implications.....	15
References	17
Appendixes*	18
Figures: Table 1	8
Pretest and the Midquarter Exam	
Table 2	10
Pretest Averaged Raw Scores According to Personality Types	

*Appendixes consist of tests referenced by document, but not included with it.

Introduction

This study evolved from my curiosity about personality type and its relationship to performance in the language arts. The present study concerns a new course in Vocabulary Development, sponsored by the Duluth Center of Continuing Education through Extension, which I taught for the second time during Fall Quarter 1981 at the University of Minnesota, Duluth. This innovation resulted from pursuing my belief that improved personal effectiveness and self-concept can be accomplished through successful communication, learning how to articulate the written and the spoken word. Experience gained from team-teaching a public speaking course, instructing students in basic writing skills, and teaching Freshman Composition revealed a paucity of vocabulary among students and, in many instances, disclosed a low self-concept. The map-territory theory of semanticist Alfred Korzybski became alarmingly clear: words are the maps people use to convey territories, their experience or reality. Incorrect mapping results in confusion or, worse yet, in not getting through. Lack of successful communication leads to frustration and hinders achievement. Indeed, students were lacking in words.

Such a deficiency can be a tremendous barrier to the job market where language skills are vital. A lead article in the Wall Street Journal last year stated that college graduates approach a labor force that must "work smarter, not harder, and be able to adjust quickly to fast-changing technologies." Industry and business are using electronic equipment to increase production and to save time. "But," says an insurance executive, "typists who don't know English, whose work has to be corrected over and over again, are defeating that purpose." Employees who erroneously copied numbers and fed

them into computers cost a Pennsylvania manufacturer close to a million dollars to correct the havoc caused by these mistakes. A California plant manager fearful of dire accidents fired several employees because they could not read well. He explained simply: "We can't take a safety chance on someone who doesn't understand instructions." Obviously poor language skills create a variety of widespread problems in the workworld. The effects are far-reaching; an uneducated labor force has been cited as a prime cause for America's difficulty in competing with Japan! Even in the electronic world of the eighties words are still basic tools. Language skills are requisite to human achievement.

Philosophies

Despite the well-supported notion that richer vocabularies are characteristic of fervid readers, attempts to enlarge vocabulary solely through extensive reading have proved inadequate. While Karlin (1967) includes reading in his three-pronged attack on vocabulary development, he obviously recommends a more comprehensive approach. Judd (1978) favors a new and immediate emphasis on vocabulary instruction in place of the traditional emphasis on syntactic structure to prepare foreign students for admission to American colleges. This novel approach would facilitate a person's ability, foreign student or not, to focus on the entire message. Moreover, the broader vocabulary would enhance reading, writing, listening, and speaking skills. These skill areas are distinguished by Shepherd (1979) as two types of vocabularies: receptive, used in reading and listening; expressive, used in writing and speaking. He cites a direct relationship between the quantity of words individuals know and use to express themselves and the quantity of words they comprehend on intake via reading or listening. There is no way for a person to use a word he does not know.

The Vocabulary Development Course

Helping students acquire new words and put them to use through greater awareness, enjoyment, and knowledge of language was the prime focus of the course. Not without humor, a motto emerged: "If you don't use it, you'll lose it." A new word really does not become part of one's vocabulary unless the word is used. Students learned techniques for discovering meaning through context, particularly useful in reading and listening. Although the limitations were also pointed out, this method reduces the frequency of interruptions caused by constant dictionary referral. Other hueristics included extracting meaning through word structure. For example, the derivative unkindly is comprised of kind (base word) and un (prefix) and ly (suffix). That meaning is changed when a prefix is placed ahead of the base word, as in unkind, was contrasted with the role of a suffix which when added to the end of the base word, as in unkindly, indicates grammar. Adding ly merely creates an adverb, a part of speech that modifies a verb, and does not affect meaning: The man spoke kindly. Other devices were blended words (motor hotel = motel), acronyms (SALT), and combining Latin (-logy) or Greek (pseudo-) forms, or word parts, to create new words such as psychology or pseudo-intellectual. Nonetheless, considerable time was also spent in dictionary use. The class displayed enthusiasm in dictionary referral following an encapsulated history of the English language. Members delighted in associating the historical background with the stated information about the word: "Middle English from Old French, from Latin." Finding out how words entered the English language heightened students' appreciation of the language itself. Etymologies from literature, mythology, peoples' names or places provided insight as well as additional words. Discovering the best synonym emphasized gradations and subtleties of meanings and added interest and color to lively class sessions.

The workbook (Smith 1979) covered Latin and Greek roots as clues to meaning, dealt with action words (verbs) and descriptive words (adjectives) and provided exercises that were reinforcing, yet varied in style. Utilitarian in nature the Vocabulary Development Course focused on non-esoteric words and encompassed pronunciation and spelling.

The Study

The hypothesis was that aspects of one's personality are associated with expanding his vocabulary.

Participants

Thirteen students of various ages constituted the class which met one night weekly (6-8:40 p.m.) and willingly participated in this research study. During the ten-week quarter, students fulfilled these requirements: pretest at the onset, weekly quizzes, mid-quarter exam which included a repeat of the pretest, and the final exam which included a posttest designed by the workbook author. (The posttest pages were collected the first night of class and withheld.) At the quarter's end, students took a questionnaire the Myers-Briggs Type Indicator (Form G).

The Questionnaire

The Myers-Briggs Type Indicator (Myers 1962) seeks to identify the preferred way an individual functions and is based on Carl Jung's personality typology. "The gist of the theory [Jung's] is that much apparently random variation in human behavior is actually quite orderly and consistent, being due to certain basic differences in the way people prefer to use perception and judgment" (p. 1). The Myers-Briggs Type Indicator, a forced choice, self-report questionnaire, can be used empirically. The Indicator classifies

individuals according to four major dichotomous groupings, each designed to indicate direction or a "habitual choice between opposites":

1. Extraversion or Introversion (E-I)

Both groupings reflect how a person orients toward life. The extravert is oriented primarily outward toward the world of people, events, and things. On the other hand, the introvert is oriented primarily inward toward the world of ideas. Thus, the introvert directs both perception and judgment on ideas; the extravert directs both on his external environment. Myers (1962) gives examples of these two orientations: "... one who would like to get to the practical application . . . would have the extravert point of view. One who takes more interest in the inner illumination which it may provide for an understanding of himself and human nature in general has the introvert viewpoint" (p. 57).

2. Sensing or Intuition (S-N)

The sensing individual becomes aware, or perceives, by gathering data through his five senses. On the other hand, intuition is indirect perception via the unconscious that heightens conscious awareness with ideas and associations. Thus, sensing and intuiting are modes of gathering data as the basis for making judgments and decisions. According to Myers (1962): "When people prefer sensing, they find too much of interest in the actuality around them to spend much energy listening for ideas out of nowhere. When people prefer intuition, they are too much interested in all the possibilities that occur to them to give a lot of notice to the actualities" (pp. 51-52).

3. Thinking or Feeling (T-F)

This category consists of two distinct modes of processing data as the basis of judgments and decisions. Thinking is a logical process which objectively discerns what is true or false. Feeling is a subjective process based on a person's value system, discriminating between valued and not valued. Myers (1962) exemplifies these two ways of judging: "If . . . one [sic] concentrates on whether or not they [ideas] are true, that is thinking-judgment. If one is conscious first of like or dislike, of whether these concepts are sympathetic or antagonistic to other ideas he prizes, that is feeling-judgment" (p. 52).

4. Judging or Perceiving (J-P)

This category reflects whether an individual relies primarily on a judging process (thinking or feeling) or on a perceptive process (sensing or intuition) in his dealings with the extraverted part of his life---the outer world. Myers (1962) illustrates the "fundamental difference" between the two attitudes: "In the judging attitude, in order to come to a conclusion, perception must be shut off for the time being. The evidence is all in. Anything more is incompetent, irrelevant, and immaterial. One now arrives at a verdict and gets things settled. Conversely, in the perceptive attitude one shuts off judgment for the time being. The evidence is not all in. There is much more to it than this. New developments will occur. It is much too soon to do anything irrevocable" (p. 58). According to Myers, the J-P preference distinguishes between judging-persons who organize and plan their lives and perceptive-individuals who exercise spontaneity and just live them.

The four major groupings described reflect the preferred way an individual functions because each category indicates a habitual choice between opposite sides of one's nature. Scoring the answer sheet to the Myers-Briggs Type Indicator reveals the strength and direction of the participant's basic preferences. For example, more points (strength) for E than I would classify that person as an extravert (direction); more points for I than E would classify that person as an introvert. Determining each index in this manner results in a personality type that is either E or I; S or N; T or F; J or P. Myers (1962) points out that type theory "accords respectful recognition to opposite kinds of people," recognizing each preference as being valuable (p. 3). There are sixteen possible combinations of personality type (ENTJ, ISFP, etc.) each with its own distinctive characteristics. Thus, it is possible to classify individuals by using the information gained from combined indices or only a single index. According to Myers (1962) both approaches are valid.

Results

Pretest

Pretest scores earned at the onset of the course ranged from 21-43 (out of a possible 50 right). The mean (average) score was 28.7 and the standard deviation (from the mean) was 5.9 points. When the pretest was repeated as part of the midquarter exam, raw scores ranged from 27-46 with a mean of 37.5 and a Standard Deviation of 5.0 points. Comparing the means (28.7 and 37.5) showed a gain of 8.8 points, as shown in Table 1. This 30.8% increase was statistically significant (.001 level of confidence) as shown by a t-test score of 6.91.

Table 1
Pretest and the Midquarter Exam

	Pretest	Pretest Repeated	Gain/%	t
Range of Raw Scores	21-43	27-46		
Mean	28.7	37.5	8.8*/30.8	6.91
Standard Deviation	5.9	5.0		

*significant at the .001 level of confidence

t = test for two correlated tests

It is evident that learning took place, but what variables were associated with the change? Was there a relationship between change and personality type?

Results of the Myers-Briggs Type Indicator (administered at the quarter's end) sorted the thirteen students into personality type groupings as follows:

ISFP (1)	ENFP (3)
ESFJ (4)	INFP (1)
ISFJ (1)	ENFJ (1)
ISTJ (1)	
ESTP (1)	

Eight S (sensing) type individuals comprised 61.5% of the class; five N (intuitive) type individuals, 38.5%.

The averaged raw scores on the pretest was 26.25 for the S (sensing) type students and 32.6 for the N (intuitive) types, revealing a difference of 6.35 points. As a group the N (intuitive) type personality scored 24.2% higher than did the group of S (sensing) type students, statistically significant (.001 level of confidence) as shown by a t-test score of 6.57.

An examination of all single index scores on the Myers-Briggs answer sheets showing the strength of the individual's basic preference revealed the following correlations with the person's score on the pretest:

<u>Number</u>	<u>Index</u>	<u>Correlation</u>	<u>Significance</u>
8	S	.64	.009
6	P	.58	.019
4	J	-.49	.046
5	N	.38	.01
9	E	.24	NS (Not Significant)
4	I	-.18	NS
2	T	-.17	NS
11	F	-.07	NS

What is reflected here is the amount and direction of the relationship between pretest scores and personality indices. For example, the P (perceptive) index had a higher correlation than did the N (intuitive) index (.58 vs .38) and correlated slightly less than the S (sensing) index (.58 vs .64). The lowest correlation was for the F (feeling) index, namely, -.07.

Taking a look at personality types consisting of four indices (ESFJ, INFP, etc.) showed a non-significant relationship, or correlation of -.16.

In using two indices of personality type, four students were NP's (intuitive-perceiving); five were NF's (intuitive-feeling); six, SF's (sensing-feeling); and the remaining two (13 students in all) were ST's (sensing-thinking) types. Table 2 shows pretest scores in light of two combined indices as well as a single index.

Table 2
Pretest Averaged Raw Scores According to Personality Types

Single Index	Scores	Two Indices	Scores
S (8)	26.25	ST (2)	29.5
N (5)	32.60	SF (6)	25.1
Difference	6.35	NF (5)	32.4
Percentage Gain*	24.20	NP (4)	34.2

*significant at .001 level of confidence

$$t = 6.57$$

Students who were NP's (intuitive-perceiving) personality types scored highest; NF's scored next, while individuals who were SF (sensing-feeling) types were lowest. The ST (sensing-thinking) type students scored in third place. Interestingly the intuitive type students scored higher than the sensing type individuals.

Midquarter Exam

Table 1 (p. 8) compared pretest scores at the onset of the course with Part III of the midquarter (the pretest repeated) taken five weeks later. A correlation of .55 was obtained between the two, statistically significant at .024 level of confidence, and showed that the higher a person scored at pretest, the higher he scored on its repeat.

How did the pretest scores relate to other parts of the midquarter exam? Part I consisted of matching words based on Latin and Greek roots to their definitions. Part II dealt with getting meaning from context: defining words and phrases read in an article. Part IV (multiple-choice) concerned principles, derivatives, combining-forms, and dictionary usage. Although the correlation of .35 was not significant statistically, it showed a trend

toward a positive relationship between pretest scores and Parts I, II, and IV on the midquarter exam. If the sample had been larger (22 instead of 13), the correlation would have been significant. Looking at the entire midquarter (Parts I-IV), the correlation was .43, almost significant at .05 level of confidence.

Final Exam

In four parts, also, the final exam dealt with: Part I, matching words with definitions; Part II, determining meaning through context or word structure or both; Part III, the workbook author's multiple-choice posttest, choosing the best definition for a given word; Part IV, multiple-choice, concerning prefixes, spelling, and pronunciation.

The correlation of the total scores (Parts I-IV) with the pretest scores was .44, significant at .067 level of confidence. The correlation of the pretest with the workbook author's posttest (Part III) was .51, significant at .05 level of confidence.

Evidence shows that pretest score is related to single personality index score as well as to the amount of change at midquarter. This held true not only for individual indices but for combinations of two indices (Table 2, p. 10). This raises an interesting question. What is the role of indices as such when taken together in predicting how much gain a person might attain by midquarter?

Multiple correlation was used to answer the question. When combined personality indices were used to predict amount of change between the pretest and its repeat at midquarter, a multiple correlation of .81 emerged between a combination of four variables and a

constant which enabled predicting scores on the midquarter exam with an accuracy within three and one-quarter points. The prediction formula was:

$$\begin{aligned} \text{Predicted change} &= .47 \times \text{type code score} - .21 \times \text{MBTI score} + \\ &.52 \text{ S (sensing) score} - .33 \text{ E (extravert) score} + 10.5 \text{ (constant)}. \end{aligned}$$

When the multiple correlation was adjusted for a sample of infinite size, it dropped to .50, accounting for 25% of the variation in midquarter (Part III) scores for the entire sample of 13 students.

Other factors could account for the remaining 75% score variation. Such factors might include class attendance, amount of studying, interest, need for achievement, etc. Stated briefly, how much a student gained based on pre- and post-testing is influenced by what that student brings to the course in the area of personality characteristics.

Discussion

Results of this investigative study support the hypothesis that a relationship exists between personality type and vocabulary development. Students who were N (intuitive) types consistently did better than those students who were S (sensing) personality types.

Sensing and intuiting, as explained earlier on page 5, are two modes of data-gathering that are quite different: "When people prefer intuition, they are . . . interested in all the possibilities" (Myers, pp. 51-52). Certainly this would be advantageous when using Latin or Greek roots as helpful hints to obtaining meaning of unfamiliar words or meaning from derivatives or meaning out of context. In contrast, ". . . people [who] prefer sensing . . . find too much of interest in the actuality [facts] . . . to spend much energy listening for ideas out of nowhere" (Myers, pp. 51-52). Perhaps S (sensing) type students regarded Latin and Greek roots as absolutes ("facts") and used

memorization instead of association to acquire new words.

In combining two personality indices, it was noted that students who were N (intuitive) types still scored higher than the S (sensing) types on the pretest (Table 2). It is interesting to note the effect of the added variable. For instance, the NP's (intuitive-perceiving) scored highest of all, even surpassing the NF (intuitive-feeling) types. Interestingly the P (perceiving) type score showed the highest correlation to the pretest score.

Among the S (sensing) types, those who were ST's (sensing-thinking) had higher pretest scores than did the SF's (sensing-feeling) type students. Noteworthy, too, is a comparison of pretest scores earned by F (feeling) types who were SF's and NF's. Consistently did the N (intuitive) type students perform better.

It must be remembered that F (feeling) and T (thinking) are modes of processing the data already gathered by a S (sensing) or N (intuitive) type person, explained earlier on page 6. "If . . . one [sic] concentrates on whether or not they [ideas] are true, that is thinking-judgment" (Myers, p. 52). Perhaps students who were ST (sensing-thinking) personality types thought in terms of "right and wrong" in matching a word to its definition or in making a choice among definitions for the best one. Possibly F (feeling) type students may have been influenced by suggested or connotative meanings of words, for "if one is conscious first of like or dislike, of whether these concepts are sympathetic or antagonistic to other ideas he prizes, that is feeling-judgment" (Myers, p. 52).

Mindful that the J-P (judging or perceiving) index reflects the primary process a person uses to deal with his outer world, we must distinguish between the judging process, that of thinking or feeling and the perceptive process, that of sensing or intuiting. ". . . in the perceptive attitude, one shuts off judgment for the time being. The evidence is not all in. There is much

more to it than this" (Myers, p. 58). Thus, the NP (intuitive-perceiving) type student is less quick to judge or reach a conclusion, taking time to explore possibilities. It would appear that the NP (intuitive-perceiving) personality maximizes intuition not only in data-gathering but in data-processing as a basis for reaching conclusions or making decisions. This possibly accounts for the NP (intuitive-perceiving) type students earning the highest pretest scores of all. Interestingly the P (perceiving) index is associated with scholastic aptitude (Myers 1962). Because only one person was an SP (sensing-perceiving) type personality, it was not possible to make any meaningful comparison with the NP (intuitive-perceiving) group.

That pretest score is related to the amount of change at mid-quarter and that students who were the N (intuitive) type personality fared better than the S (sensing) types emerge as important findings in this study. Myers (1962) points out that a high correlation exists between the N (intuitive) type students and scholastic aptitude, as measured by SAT scores where the SAT-V (verbal) is particularly outstanding. Based on the tendency of N (intuitive) type students to surpass S (sensing) type students in academic achievement, Myers (1962) hypothesizes that intuitive personality type students have a greater natural interest in the area of scholastic achievement. Intuition surfaced in Nichols and Holland's prediction study (1963) based on the first year performance of high aptitude college students (Covner 1979). Results of the current study enabled prediction of midquarter exam scores (Part III, pretest repeated) within three and one-quarter points.

Summary and Conclusions

This project evolved from my curiosity about personality type and its relationship to performance in the language arts. Based on a new course in Vocabulary Development, this investigative study hypothesized that aspects of one's personality are associated with vocabulary acquisition.

Participants were 13 students who comprised the evening class that met once a week for ten consecutive weeks. During the quarter students took a pretest (onset), weekly quizzes, midquarter exam (included pretest repeated), and the final exam which contained a posttest designed by the workbook author. At the end of the quarter students took the Myers-Briggs Type Indicator which derived from Carl Jung's personality typology.

The following conclusions appear warranted:

1. Personality type related to student performance, proving the hypothesis of this study to be true.
2. Students who were N (intuitive) type personality consistently did better in the course than those students who were S (sensing) types.
3. Adding a second index, or combining two indices like NF (intuitive-feeling) or SF (sensing-feeling) created differences in other aspects of personality which might be related to the person's interests, motivation, study habits, etc.
4. The Myers-Briggs Type Indicator was useful, providing insights into individual differences that relate to vocabulary acquisition.

Implications

The present study demonstrated that knowledge of individual personality type can provide insight and understanding into student learning behavior and performance, which could influence course planning and teaching methods. It also pointed out that functional differences exist among people that can

be extremely valuable, depending on the situation, circumstances, and goals.

An awareness of personality type could help students understand themselves better and perhaps encourage them to sometimes use processes other than their preferred or usual one. Such a challenge could be motivating to achievement.

That the Myers-Briggs Type Indicator was successfully used to predict scores on the midquarter exam has potential for future, careful use and should be researched further.

References

- Hymowitz, Carol. "Employers Take Over Where Schools Failed to Teach the Basics." The Wall Street Journal, January 22, 1981, Sec. 1, p. 1, col. 6.
- Judd, Elliott L. "Vocabulary Teaching and TESOL: A Need for Reevaluation of Existing Assumptions." TESOL Quarterly, 12, No. 1 (March 1978), pp. 71-76.
- Karlin, Robert. "A Three-Pronged Attack on Vocabulary Development." (ERIC ED 013 711) Presented at the International Reading Association Conference, Seattle (May 4-6, 1967).
- Myers, Isabel Briggs. The Myers-Briggs Type Indicator Manual 1962. Princeton, New Jersey: Educational Testing Service, 1962.
- Shepherd, James F. College Vocabulary Skills. Boston: Houghton Mifflin, 1979.
- Smith, Elliott L. Contemporary Vocabulary. New York: St. Martin's Press, 1979.

Appendix

Myers-Briggs Type Indicator (Form G)

Midquarter Exam

Final Exam